3.30 Site AR-30

Owner: P. Biggs; Long -94.413616 Lat 35.910833

- **Available Data and Analysis:** There have been no soil or groundwater samples collected within two miles of the site. Flow off of the site to the west joins the flow from north to south. On this branch there were co-located surface water and sediment samples upstream (0.63 mg/L P and 858 mg/kg P, respectively) and downstream (0.35 mg/L P and 1,092 mg/kg P, respectively). The incremental increase in sediment P is potentially the result of several agricultural facilities on the west-facing slope above the stream. The town of Lincoln, with a POTW and urban development, is located upgradient from the upstream samples. See Appendix B. Any drainage to the east will meet the aforementioned stream in between the two sample locations. The eastern drainage is the recipient of upstream P contributions, as represented by edge-of-field samples (9.29 and 7.066 mg/L P) upstream of AR-30.

- **Site Effect on the Watershed:** Based on the available data and analysis, there is no evidence that site AR-30 is the cause of the affected waters and sediments of the IRW.

3.31 Site AR-31

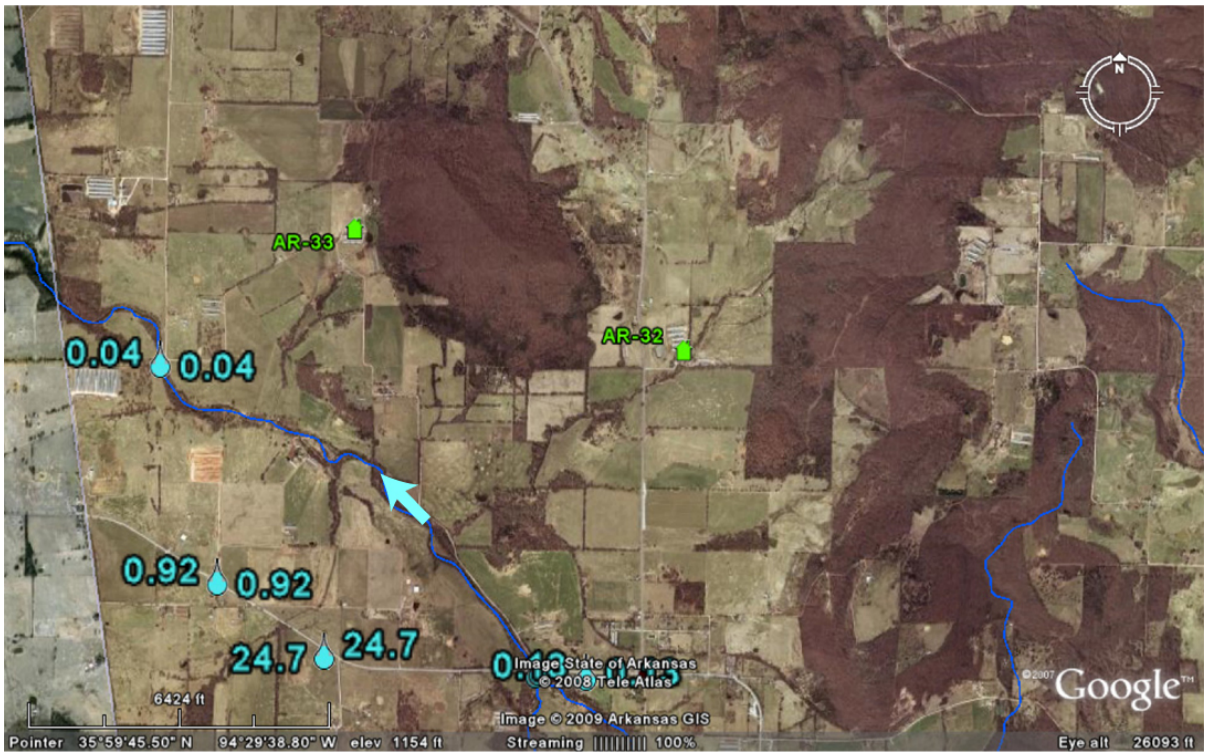
Owner: D. Edwards; Long -94.468650 Lat 35.958183

- **Available Data and Analysis:** No soil or groundwater samples have been collected either on or within two miles of the site. A sediment sample (328 mg/kg P), less than the 460 mg/kg P baseline, collected within two miles downgradient from AR-31, shows no apparent effect. Two surface water samples were collected within two miles downgradient of AR-31 (~0.11 mg/L P and 0.14 mg/L). There are other potential anthropogenic P sources between AR-31 and these surface water samples. See Appendix B.

- **Site Effect on the Watershed:** Based on the available data and analysis, there is no evidence that site AR-31 is a source of P to surface waters or sediments of the IRW.

3.32 Site AR-32

Owner: J. Moua; Long -94.488333 Lat 35.997716

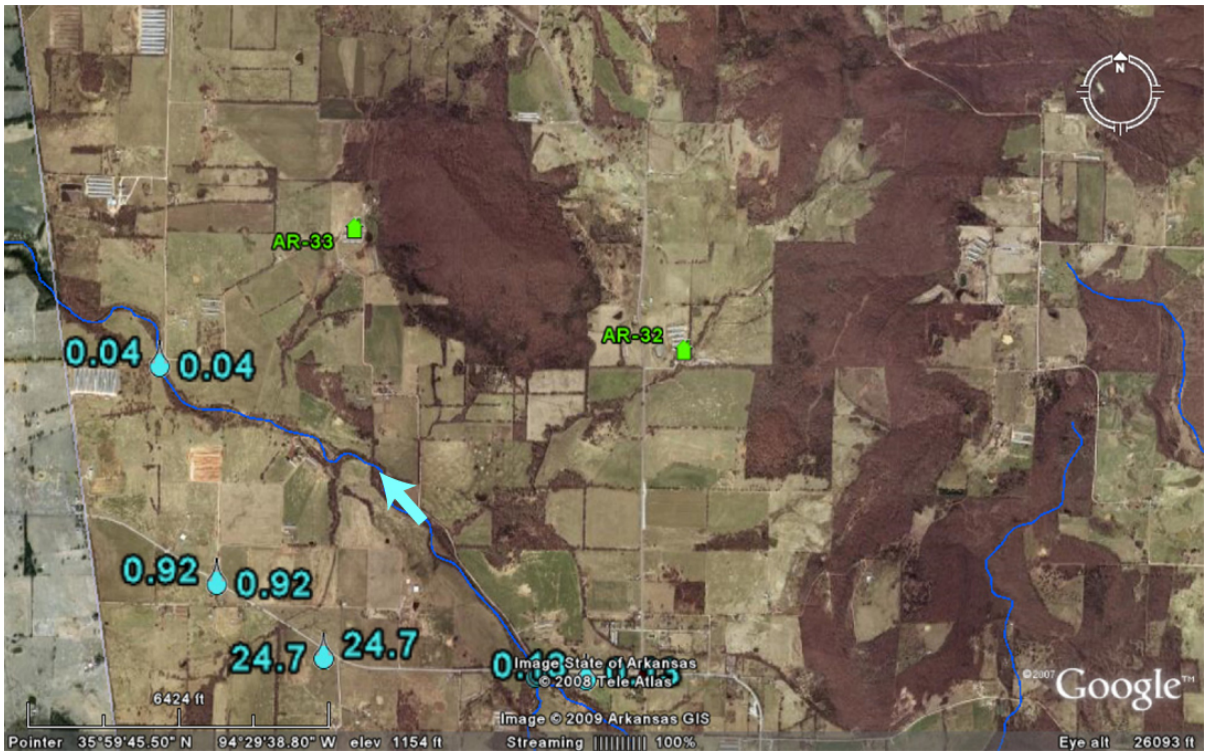


- **Available Data and Analysis:** There have been no soil, sediment, or groundwater samples collected within two miles of the site, and no edge-of-field samples have been collected. Runoff from the area moves to the southwest. Surface water drains to a stream ~1.3 miles southwest of AR-32. Approximately 0.6 miles upstream of the confluence, two surface water samples were reported at 0.13 and 0.17 mg/L P, while a sample collected 1.4 miles downstream from the confluence was 0.04 mg/L P. A sediment sample collected about three miles downstream from the confluence contained 365 mg/kg P.

- **Site Effect on the Watershed:** Based on the available data and analysis, there is no evidence that site AR-32 has affected receiving waters or sediments of the IRW.

3.33 Site AR-33

Owner: S. Ramsey; Long -94.512533 Lat 36.004950

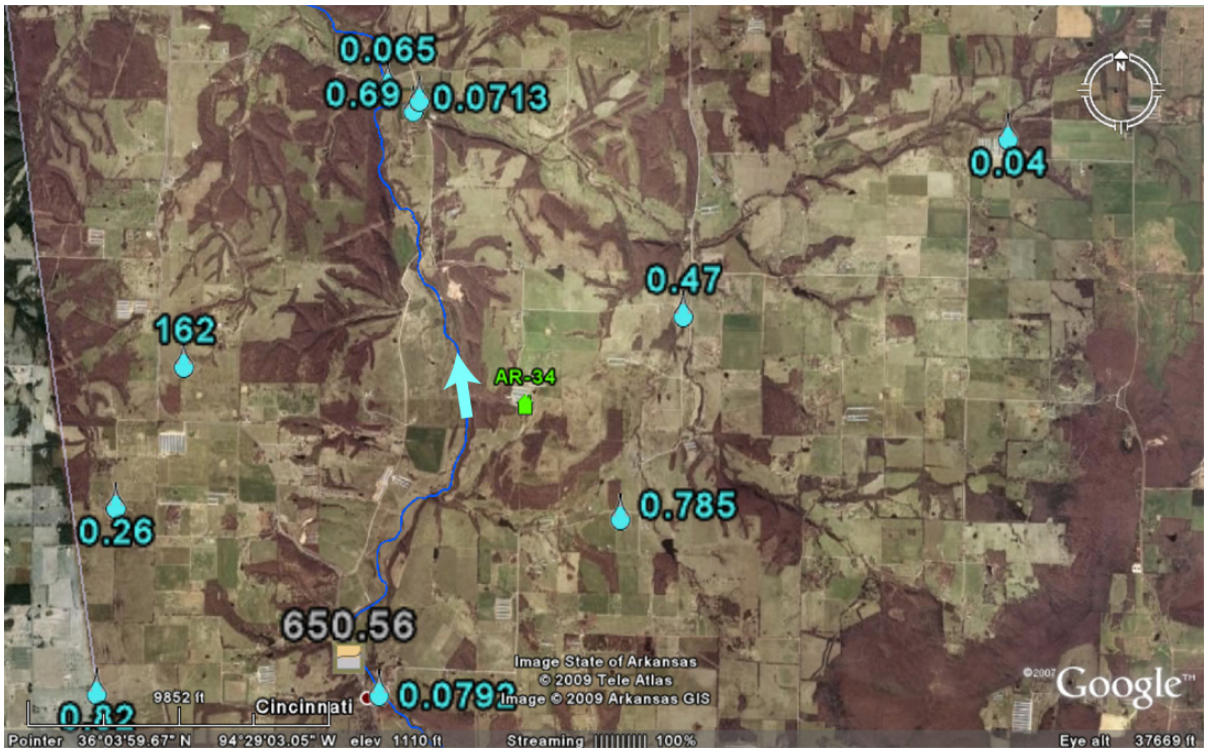


- **Available Data and Analysis:** There have been no soil or groundwater samples collected within two miles of the site. Runoff moves to the south. A surface water sample (0.04 mg/L P) collected one half mile downstream from the confluence of the AR-33 drainage channel and the receiving stream was analyzed at 0.04 mg/L P. The nearest sediment sample (about two miles downstream) was 364 mg/kg P, consistent with the baseline population.

- **Site Effect on the Watershed:** Based on the available data and analysis, site AR-33 has not affected receiving waters or sediments of the IRW.

3.34 Site AR-34

Owner: Hancock Holdings LLC; Long -94.493183 Lat 36.064166

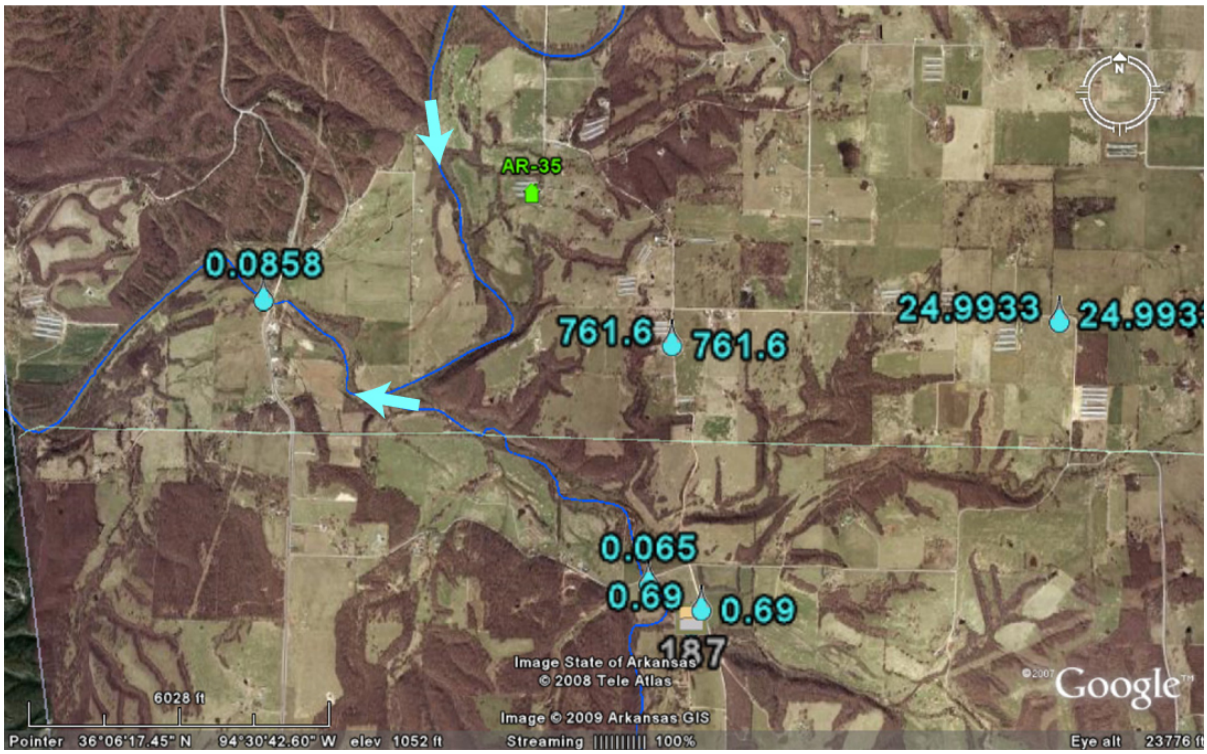


- **Available Data and Analysis:** This site is completely surrounded by agricultural land. There have been no soil or groundwater samples collected within two miles of the site. Stream sediment and surface runoff would move to the west. The stream flow is to the north. Upstream of site AR-34 (1.7 miles) and just downstream from the village of Cincinnati, surface water P was 0.079 mg/L with co-located sediment of 650 mg/kg. Two miles downstream from the site, surface water P was 0.065 mg/L.

- **Site Effect on the Watershed:** Based on the available data and analysis, there appears to be no effect from site AR-34 to waters or sediments of the IRW.

3.35 Site AR-35

Owner: G. Crockett; Long -94.516850 Lat 36.115116



- **Available Data and Analysis:** There have been no soil or groundwater samples collected within two miles of the site. Drainage from this site would move to the west and southwest. More than eight miles upstream of AR-35, P was 0.17 mg/L. A surface water sample collected downgradient from the confluence with a higher-order stream, about two miles downstream from AR-35, was 0.086 mg/L P. This sample location is adjacent to dwellings, and the river also may be the recipient of other potential sources of anthropogenic P. See Appendix B.

- **Site Effect on the Watershed:** Based on the available data and analysis, there is no evidence that site AR-35 has affected receiving waters or sediments of the IRW.

4 Conclusion

Based on my analysis of the data, there is no evidence that any of the Cargill locations have affected sediment, surface waters, or groundwater of the State of Oklahoma or the State of Arkansas.

5 References

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